Summary of this response

- A new power of attorney appointing the undersigned; and revoking all prior powers is submitted;
- Information Disclosure Statement for art cited in corresponding PCT application PCT/US97/14204;
- Formal drawing (47 sheets are submitted);
- Formal copies of Tables I, II, III, and IV as pages 25 30 of the specification;
- Discussion distinguishing the present invention over Daughton;
- Claims 1 and 33 are being amended to correct the Examiner's noted informalities;
- Claims 24, 31, and 65 are being amended to overcome their rejection under 35 U.S.C. 112;
- Independent claims 1, 8, 12, 50, and 65 are being amended to overcome 35 U.S.C. 102(b) rejection.
- Claims 3 6, 15 17, 51, 53, 56, 60, 61 are amended to improve their form or to correct spelling;
- Claims 66 through 75 are being added by this amendment.

The Present Invention and Daughton

Although both the present invention and Daughton utilize partially defective memory chips in end products, the structures used to accommodate for the defects are different. Importantly, the scope of accommodation available in accordance with the present invention is far greater than that available by the teachings of Daughton.

The Present Invention

- The structure to be corrected can be a chip; a package of chips; or an assembly of chips and/or packages on a board;
- Each structure is designed to a "target" memory capacity without inclusion of spare data lines;
- Multiple defects in an independent structure can be corrected;
- A corrected memory end product comprises a "main" part, an independent "backup" part, and a correcting pattern of interconnection of the data lines with the data I/O connections of the end product.
- Correction is accomplished by substitution of an operational data line of a "backup" part for a
 defective line of a "main" part.

Daughton

- The structure to be corrected is a chip;
- Each structure is designed to a "target" memory capacity with inclusion of a spare data line;
- Only a single defect in an independent structure can be corrected;
- A corrected memory end product comprises a single chip.
- Correction is accomplished by redirection of cell address signals from a defective cell line to the "spare" cell line of the chip, along with circuitry for sensing signals from the spare line.